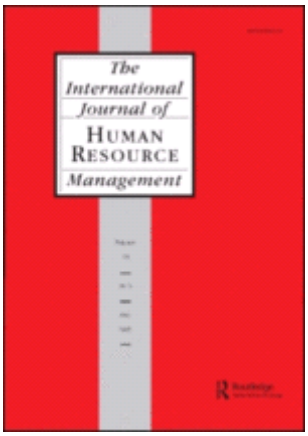


Quality Enhancement or Cost Reduction? The Influence of High-Performance Work Systems and Power Distance Orientation on Employee Human Resource Attributions

Journal:	*The International Journal of Human Resource Management*
Manuscript ID	RIJH-2018-0254.R5
Manuscript Type:	Original paper
Keywords:	HRM process, HR attribution, High-performance work systems, power distance, HR strategy

Quality-enhancement or Cost-reduction? The Influence of High-Performance Work Systems and Power Distance Orientation on Employee Human Resource Attributions

Abstract

Human resource (HR) attributions relate to employees' beliefs about why HR practices are implemented in their organization. Although research shows that HR attributions influence employees' attitudes, behaviors, and performance, there is little understanding of the antecedents of HR attributions. To examine the relationships between perceptions of high-performance work systems (HPWS) and power distance orientation (PDO) on the one hand and two types of HR attributions (quality-enhancement and cost-reduction) on the other, we conducted two studies. The results of Study 1 (an experimental study, N = 171 students) and Study 2 (a field study, N = 255 employees from China) showed that PDO weakened the relationships between HPWS perceptions and both types of HR attributions. Our studies fill an important theoretical gap regarding how employees' cultural orientation changes the effect of HPWS perceptions on HR attributions.

Keywords: HR attributions, power distance orientation, high-performance work systems, experimental study, field study.

Attribution theory (Heider, 1958; Jones & Davis, 1965) describes individuals as naive psychologists who observe, investigate, and explain the behaviors of themselves and others to make sense of why people behave the way they do. Individuals tend to attribute their own behavior to internal causes (e.g., their motivation or ability), while attributing the behavior of others to external reasons (e.g., situations). Attribution theories have been applied to several research fields, including human resource management (HRM) (Hewett, Shantz, Mundy, & Alfes, 2018; Koys, 1988, 1991; Nishii, Lepak, & Schneider, 2008; Sanders & Yang, 2016).

Koys (1988; 1991) was one of the first to apply attribution theory to the HRM research field. He distinguished two types of employee attribution regarding HRM activities: internal attributions, where employees believe that HRM activities are freely chosen by the organization or are performed "in a spirit of justice," and external attributions, where employees believe that HRM activities are implemented because of external causes such as the pressure "to comply with government relations." Koys (1991) found that managers were more committed to organizations when they attributed HR practices to internal reasons.

Building on this work, Nishii et al. (2008) introduced the concept of *HR attributions* to describe employees' beliefs about why HR practices are implemented. In this classification, internal attributions constitute employees' beliefs that HR practices are designed in response to internal pressures, such as department mergers, a change in leadership, or new financial guidelines, while external attributions constitute employees' beliefs that HR practices are designed in response to situational pressures, such as complying with union requirements. Unlike Koys (1988; 1991), Nishii et al. (2008) argued that internal attributions are likely to be multidimensional. By intersecting the dimensions of "commitment-versus-control management approach" and "strategic-versus-employee focus," they divided internal attributions into four

types: service quality, employee well-being, cost-reduction, and employee exploitation attributions. Utilizing data from a service organization, Nishii et al. found that HR attributions of management's intent to enhance *service quality* and *employee well-being* (commitment attributions) were positively related to employee commitment and satisfaction. By contrast, HR attributions of management's interest in *cost-reduction* and *employee exploitation* (control attributions) were negatively related to employee satisfaction (Nishii et al., 2008). Finally, external attributions did not show a significant relationship with employee commitment or satisfaction.

Nishii et al. (2008) inspired several follow-up studies focusing on the consequences of HR attributions (Fontinha, Jose Chambel, & De Cuyper, 2012; Chen & Wang, 2014; Van de Voorde & Beijer, 2015; Shantz, Arevshatian, Alfes, & Bailey, 2016; Tandung, 2016). Almost all of these confirmed that HR attributions are important for employee outcomes. However, in a recent review, Hewett et al. (2018) concluded that there is a "dearth of research" on the antecedents of HR attributions, suggesting that research should include antecedents in its model building to answer how and why employees make sense of HR practices. In the present study, we respond to this call and extend the research focus from examining the consequences of HR attributions to examining their antecedents.

We follow Kelley (1967; see also Kelley & Michela, 1980) and Jones and David (1965) in highlighting employee perceptions of *high-performance work systems* (HPWS) and their *power distance orientation* (PDO) as two important antecedents of two types of attribution: quality-enhancement and cost-reduction. HPWS are defined as a group of separate but interrelated, internally consistent, and complementary HR practices designed to enhance employee and organizational performance through increasing employees' skills, motivations,

and opportunities to contribute (e.g., Appelbaum, Bailey, Berg, & Kalleberg, 2000). PDO refers to "the extent to which an individual accepts the unequal distribution of power in institutions and organizations" (Clugston, Howell, & Dorfman, 2000, p. 9). As HPWS concern HR practices on the strategic level of the organization, we focus on two HR attributions with a strategic focus (instead of an employee focus): service quality attribution (commitment-focused) and cost-reduction attribution (control-focused). As the service quality attribution involves enhancing the quality of both goods and performance (Nishii et al., 2008), we refer to it as the *quality-enhancement attribution*. We did not consider external attributions because they are weakly associated with the cognitions, feelings, and behaviors of individuals (Koys, 1991; Nishii et al., 2008).

By examining the joint influence of HPWS and employee PDO on HR attributions, we contribute to the growing body of HR process research literature in three ways. First, we complement and extend the focus of HR attribution research from the consequences to the antecedents. This extension addresses the call for more research on the antecedents of HR attributions (Hewett et al., 2018) and contributes to our understanding of the influence of HPWS on HR attributions. Van de Voorde and Beijer (2015) were among the first to examine the antecedents of HR attributions, finding that line managers' perceptions of HPWS are positively related to employees' well-being and exploitation attributions (which they referred to as performance attribution). Instead of line managers, we examine the relationships between HPWS and HR attributions from the perspective of employees' perceptions, as we argue that these are the most important drivers of employees' HR attributions (see Fiske & Taylor, 1991). As Nishii et al. (2008, p. 508) state: "It is important to note that although managerial report (…)

has been examined, research has yet to focus on employee perception of the extent to which these factors motivate HR practices."

Second, we include employee PDO in the consideration of the relationships between HPWS perceptions and HR attributions to determine whether employees with different PDO differ in their HR attributions. Furthermore, cultural values play a critical role in influencing employees' workplace perceptions, attitudes, and behaviors (e.g., Hofstede, 1980; Yoo, Donthu, & Lenartowicz, 2011). In their theoretical article, Farndale and Sanders (2017) discussed how HR processes may differ across cultures. Our paper extends and elaborates on their theoretical arguments as well as empirically examining the influence of PDO.

Finally, our study contributes to the research methodology in HR process research (Yang & Dickenson, 2014). While survey-based designs can address the associations between HPWS and HR attributions, they cannot demonstrate the causal nature of the relationship. Therefore, an experimental design allows us to systematically vary HPWS and control for irrelevant factors. To compensate for the low external validity of the experimental designs (Cook & Campbell, 1967; Yang & Dickenson, 2014), we further carried out a survey study (Study 2) to generalize our research findings to real-life organizational situations. This combination of experimental and survey methods may open another avenue for studying HR processes.

The remainder of the article proceeds as follows. First, we discuss the relationships between HPWS and two HR attributions (quality-enhancement and cost-reduction). We then elaborate on the moderating effects of employee PDO. A discussion of the results is followed by an assessment of how the findings integrate with existing HR process theory and research. We conclude with directions for future research and practical implications.

Employee perceptions of HPWS and HR attributions

Inspired by Nishii et al.'s (2008) seminal work, many studies have empirically examined the effects of HR attributions (e.g. Hewett et al., 2018). Some of these studies focused on higher-order attributions (commitment- versus control-based). For example, Fontinha et al. (2012) studied outsourced information technology workers who developed commitments to both the outsourcing company that hired them and the client organization where they worked daily, finding that the relationship between the workers' HR commitment attributions and the commitment to the client organization was mediated by the commitment to the outsourcing company. Further, Chen and Wang (2014) found that commitment attribution was positively related to supervisory-related task performance and negatively related to turnover intention. Other studies focused on lower-order attributions (service quality, employee well-being, cost-reduction, and employee exploitation). For instance, Shantz et al. (2016) found that service quality attribution was positively related to job involvement and negatively related to emotional exhaustion, while cost-reduction attribution was positively related to work overload. Tandung (2016) found that both the service quality and well-being attributions were negatively related to turnover intention, while the cost-reduction and exploitation attributions were positively related to it.

Unlike these studies, Van de Voorde and Beijer (2015) examined the antecedents of HR attributions, focusing on the relationship between managers' understanding of HPWS and employees' HR attributions. Similarly, we also focus on HPWS as the antecedents, but from the perception of the employees rather than the managers. HPWS, also known as high-commitment HRM (Walton, 1985; Collins & Smith, 2006), high-performance HR practices (HPHPs; Sun, Aryee, & Lam, 2007), and high-performance work practices (HPWP; Combs,

Liu, Hall, & Ketchen, 2006), rely on a managerial approach that leads to high employee performance. In this study, we consider the terms HPWS, high-commitment HRM, HPHPs, and HPWP interchangeable, as they all comprise bundles of interrelated HR practices intended to enhance employees' involvement, commitment, and empowerment. Examples include employment security, selective recruiting, extensive training, employee participation, and performance-based pay (Combs et al., 2006; Sun et al., 2007).

HR scholars have increasingly relied on employees to measure HR practices (Beijer, Peccie, Van Veldhoven & Paauwe, in press) in different ways. For instance, Den Hartog, Boon, Verburg, and Croon (2013) rely on a "perceived HR system," while Jiang, Hu, Liu, and Lepak (2017) consider employees' reports of the available HR practices in their organization. Beijer et al. (in press) distinguish descriptive or factual and evaluative or subjective measures of perceived HR practices; while descriptive measures (e.g., "I have received training in the last year," or "Incentives within this organization are based on team performance") involve a cognitive assessment, evaluative measures (e.g., "Training programs are comprehensive," or "Great effort is taken to select the right person") involve more affective assessments of the practices.

In our two studies, we combine different ways of measuring employee perceptions of HPWS practices. In Study 1, after the manipulation of the HPWS conditions in terms of high vs. low (a descriptive way of measuring employee perceptions), in the manipulation checks respondents were asked to indicate the condition in terms of evaluative items such as "Employees in my organization have many opportunities for career development" (Snell & Dean, 1992; see also Sanders & Yang, 2016). In Study 2, we asked employees to indicate evaluative items such as "Our compensation includes high wages" from the high-performance

HR practices scale developed by Sun et al. (2007). In order to compare the results of Study 1 and Study 2, we report both the descriptive way of measuring the experimental conditions (high vs. low HPWS) as well as the evaluative perceptions (manipulation checks).

As mentioned earlier, we focused on the two strategic-focused HR attributions (quality-enhancement and cost-reduction) corresponding to the strategic focus of HPWS. In line with our research focus, we studied HPWS at the individual level. We first used information processing theory to explain the connections between employee perceptions of HRM content (i.e., HPWS) and their HR attributions. Research on information processing suggests that individuals understand their environment in three stages: selection, organization, and interpretation (Fiske & Taylor, 1991). The selection stage involves choosing stimuli, cues, and signals to which to pay attention. In the organization stage, individuals assign the new information to familiar categories. In our case, these first two stages concern employee perceptions of HPWS. In the final stage of interpretation and judgment, individuals translate the organized information and give meaning to the information, making judgements. The stage of interpretation is also called attribution (Kelley, 1973). Based on this theory, we expect that employee perceptions of HPWS influence the formation of their HR attributions.

Second, we rely on signaling theory (Connelly, Certo, Ireland, & Reutzel, 2000; Ehrnroorth & Bjorkman, 2012) to explain the specific relationships between employee perceptions of HPWS and their HR attributions in terms of quality-enhancement and cost-reduction. The primary concern of signaling theory is reducing information asymmetry between information senders (management in our case) and information receivers (employees in our case) (Spence, 2002). Signaling theory further suggests that, when senders and receivers have different information, it is necessary to describe the situation and effects in order to reduce

information asymmetry. While the sender needs to choose whether and how to communicate the information (HR signals of HPWS), the receiver (employees) will need to choose how to interpret the HR signals. Based on this, HR practices can be viewed as signals sent by management to employees to communicate the organization's values and expectations.

Following Van de Voorde and Beijer (2015), we argue that, the more HPWS practices are implemented by management, the stronger and clearer employees' perceptions will be. More specifically, Van de Voorde and Beijer (2015, p. 64) stated: "Drawing on (HRM-specific) attribution theory (Kelley, 1967; Bowen & Ostroff, 2004) we argue that the attribution-making process is facilitated by the level of enacted HPWS through the mechanism of distinctiveness, consistency and consensus." They argue that, when an organization implements more HPWS practices, the distinctiveness of HR increases as more employees are affected by these practices ("high coverage"), providing employees the opportunity for sense-making and understanding the intentions of the organization. Complementary, reinforcing HPWS practices also send out a clear signal of consistency. Finally, Van de Voorde and Beijer (2015) expect that the high consistency and high coverage of HRWS practices lead to more agreement among employees in terms of their perceptions.

In sum, following Van de Voorde and Beijer (2015), we expect that, when an organization implements more complementary HPWS practices, management signals to employees that the organization cares about and values the employees and expects them to produce and provide high-quality goods and services (Schuler & Jackson, 1987; see also Nishii et al., 2008). We assume that HPWS practices are in this way important in forming employee attributions through day-to-day activities. With such practices, employees are more likely to pick up on these signals, make sense of them, and form a quality-enhancement attribution, as

well as being less likely to form a cost-reduction attribution. We formulated our first hypothesis as follows:

Hypothesis 1a: Employees who perceive high levels of HPWS are likely to make quality-enhancement attributions;

Hypothesis 1b: Employees who perceive low levels of HPWS are likely to make cost-reduction attributions.

The moderating effects of PDO

PDO concerns the extent to which an individual values status, authority, and power in an organization (Kirkman, Lowe, & Gibson, 2006). Generally, employees with high PDO are sensitive to status differences and tend to accept orders from higher up the hierarchical ladder. They have less appreciation for autonomy and empowerment and are reluctant to engage in participative behavior (Chen & Aryee, 2007; Newman & Nollen, 1996: Zhong, Wayne, & Liden, 2016). They are used to their managers making the decisions and tend to follow their instructions (Khatri, 2009; Kirkman, Chen, Farh, Chen, & Lowe, 2009). As a result, they are more likely to see HPWS as an approach to "regulate and control." Further, they are more likely to passively accept and follow HR practices rather than actively attaching meaning to or making sense of them. Following this reasoning, the relationship between HPWS and the quality-enhancement and cost-reduction attributions should be weaker for high-PDO employees than for low-PDO employees.

Looking at this from the opposite direction, low-PDO employees tend to engage in higher levels of participation (Brockner et al., 2001; Gomez, Kirkmann, & Shapiro, 1999). As they are less sensitive to status differences, they tend to view HPWS signals as opportunities offered by their organization rather than requirements set by their organization. With this

mentality, they are motivated to make sense of HPWS signals and understand why their organization implements HPWS. As a result, the relationship between HPWS and the quality-enhancement and cost-reduction attributions should be stronger for low-PDO employees than for high-PDO employees.

Previous studies empirically support the line of reasoning that high-PDO employees are less sensitive to picking up signals from management (Brockner et al., 2001; Lam, Schaubroeck, & Aryee, 2002; Lee, Pillutla, & Law, 2000). For instance, Farh, Hackett, and Liang (2007) found that the relationships between perceived organizational support (POS) and employee outcomes were moderated by PDO, the relationships being stronger for low-PDO employees. PDO was also found to moderate the relationship between transformational leadership and procedural justice, the relationship again being stronger for low-PDO employees (Kirkman et al., 2006). The essence of the moderating effects of PDO lies in the fact that low-PDO employees favor a participative way of working and thus interpret POS and transformational leadership as they are intended, i.e., facilitating empowerment and involvement and reducing controlling and monitoring.

Following this line of reasoning, we formulated our second hypothesis:

Hypothesis 2: Employee power distance orientation (PDO) will moderate the relationships between HPWS and the quality-enhancement (H2a) and cost-reduction attributions (H2b), such that these relationships will be stronger for low-PDO employees than high-PDO employees.

Study 1

We employed the vignette technique (Alexander & Becker, 1978; Yang & Dickenson, 2014) to manipulate HPWS (Sanders & Yang, 2016). Our experimental design was a one-factor

between-group design: About half of the respondents were randomly assigned to the high-HPWS condition and read a vignette describing a high level of HPWS executed by an organization. The other half were randomly assigned to the low-HPWS condition and read a vignette describing a low level of HPWS.

METHOD

Sample. A total of 171 students from an Australian university voluntarily participated in this study. They received credits for their participation. The mean age of the respondents was 19.24 years (*SD* = 1.46 years), and 57% were female. Forty-seven percent of the students had work experience, varying from one day to several days per week.[1] A questionnaire package including the vignette, the measurement of PDO, and employee HR attributions were distributed to the respondents via e-mail and intranet.

Manipulations of HPWS. HPWS were manipulated with two conditions: 69 respondents in the high-HPWS condition and 76 in the low-HPWS condition. In addition, a control condition with 26 respondents who received a vignette containing the first part while no HPWS information was presented in the second part.

The respondents were asked to read a vignette consisting of two parts. In part one, we briefly described the structure of a fictional organization (see also Sanders & Yang, 2016): "The finance department is responsible for financial issues; the HR department is responsible for personnel-related issues; the information technology department supports the computer systems within the company; the public relations department is responsible for external communications of the organization; and the product development department is responsible for designing and developing new electronic products." In part two, we described the HPWS of the fictional organization by tapping four HR practice: selective recruiting, employment

security, performance-based pay, extensive training, and employee involvement (Combs et al, 2006; see also Sanders & Yang, 2016).

For the high-HPWS condition, the vignette read as follows:

"Management of your company tries to create a positive and productive atmosphere. After selective recruitment employees receive a permanent contract and have the possibility to be promoted if they fulfil criteria for the higher position. Performance of the employees is monitored twice a year and is related to their salary. Employees are asked to participate in decision making and their opinions are taken seriously. Furthermore, management has reserved a financial budget for the development of the employees: for instance, costs for an internet connection at home are paid by the company, and laptops are available, so employees can work where they like. Management takes care that employees are informed about important decisions made by the management."

For the low-HPWS condition, the vignette read as follows:

"Management of your company focuses primarily on making profit. Employees are hired after a short interview with the future line manager and receive a temporary contract which may be renewable for a maximum of two years. Salaries for employees in similar positions are the same. It is not possible to receive extra monetary compensation via excellent performance. Decisions are made by the top management of the organization, and employee opinions are hardly taken into account. Within this organization there is little budget available for personal development of the employees."

Manipulation checks of HPWS. Immediately after the scenario, five items from the scale of Snell and Dean (1992; see also Sanders & Yang, 2016) were used to check whether the respondents understood HPWS as intended. An example item is "In this company, I would be encouraged to participate in decision making" (1 = *totally disagree* to 7 = *totally agree*). The internal reliability of these five items was good (Cronbach's $\alpha = .96$). We included some factual questions throughout the questionnaire for verification checks. Students who ticked the same answer to all questions were removed from the study. If respondents did not answer the factual questions like "Please indicate answer 'A' on the following question" correctly, their responses were also deleted from the study. Less than 1% of responses were deleted.

Employee PDO. This was measured with the five-item scale of Yoo et al. (2011). All items were measured on a 7-point scale (1 = *totally disagree* to 7 = *totally agree*). An example item is "People in higher positions should make most decisions without consulting people in lower positions." The internal reliability of this scale was good (Cronbach's $\alpha = .73$).

HR attributions. We adjusted two items from the scale developed by Nishii et al. (2008) to measure employee HR attributions. The respondents were asked to indicate their agreement about why the organization presented in the vignette implemented such HRM practices (1 = *totally disagree* to 7 = *totally agree*). For the quality-enhancement attribution, the item was "HR practices are implemented in this way because *the organization wants to help employees deliver better quality service.*" For the cost-reduction attribution, the item was "HR practices are implemented in this way because *the organization tries to keep costs down.*"

Controls. We collected the respondents' demographic data, such as age and sex. To rule out these factors influencing the respondents' perceptions of the scenario and their responses to the dependent measures, we checked the correlations between age and sex with the other measures. No correlation reached a statistically significant level ($p < .01$). This suggests that the respondents' demographics did not play a significant role in influencing how they understood and attributed HPWS; thus, response differences across the two groups of respondents (high- versus low-HPWS conditions) were triggered mainly by the manipulation (the vignettes presented to them).

RESULTS

Manipulation checks. First, we compared the respondents' average scores on the questions for the manipulation checks (Snell & Dean, 1992; Sanders & Yang, 2016) between the low, high, and control conditions. There were significant differences between these three

conditions: F (2,169) = 37.98, $p < .01$. Post-hoc analyses showed a significant difference between the low- and high-HPWS conditions: $M_{\text{high condition}} = 5.84$ ($SD = .91$); $M_{\text{low condition}} = 3.85$ ($SD = 1.66$); F (1,143) = 80.49, $p < .01$. Second, the differences between the control and high-HPWS conditions, and between the control and low-HPWS conditions, were also significant: F (1,94) = 55.17, $p < .01$ and F (1,101) = 43.55, $p < .01$ ($M_{\text{control}} = 4.27$; $SD = 1.02$). These findings suggest that the manipulations worked well.

Measurement model. We conducted a series of confirmatory factor analyses to verify the measurement model. The purpose of these analyses was to identify the optimal number of factors and establish the measurement invariance and discriminant validity of each factor. All models were tested in Mplus 7.31 using the maximum-likelihood estimator (Muthén & Muthén, 2012). A close model fit was indicated by a non-significant chi-square, a comparative fit index (CFI) greater than .90, a root mean square error of approximation (RMSEA) of less than .06, and a standardized root mean square residual (SRMR) of less than .08 (Hu & Bentler, 1999).

First, we tested our hypothesized measurement model. This model was comprised of three factors: PDO, quality-enhancement attribution, and cost-reduction attribution. The model provided a close fit to the data: $\chi^2(df = 11) = 14.74$, $p = .07$, CFI = .95, RMSEA = .06, SRMR = .04. Two alternative models were then tested. In the first alternative model, the items for the quality-enhancement and cost-reduction attributions were combined into one factor. This model produced a poor model fit: $\chi^2(df = 12) = 34.19$, $p < .01$, CFI = .83, RMSEA = .13, SRMR = .07. In the second alternative model, all of the items were loaded on a single factor. This model similarly produced a poor fit: $\chi^2(df = 13) = 42.33$, $p < .001$, CFI = .74, RMSEA = .19, SRMR = .17. As a result, we opted to retain the hypothesized measurement model for the later analysis.

Descriptive analysis. Table 1 reports the means, *SD,* and correlations. HPWS were positively related to quality-enhancement attribution (r = .51, p < .01) and negatively related to cost-reduction attribution (r = -.45, p < .01). Quality-enhancement and cost-reduction attributions were negatively related (r = -.38, p < .01). PDO was positively related to quality-enhancement attribution (r = .21, p < .01), but not to cost-reduction attribution (r = -.08, *ns*).

Hypotheses testing. We used a linear regression analysis to test the hypotheses. Table 2 (model 1) shows that HPWS led to more quality-enhancement attribution (b = .51, p < .01) and less cost-reduction attribution (b = -.48, p < .01). These results support H1a and H1b. To test H2, we used Hayes' (2013; see also Hayes & Rockwood, 2017) process macro for SPSS to estimate the moderating effect of PDO on the relationship between HPWS and quality-enhancement and cost-reduction attributions. The interaction effect of HPWS and PDO on quality-enhancement attribution was negative (β = -.25, p < .05). The interaction effect is depicted in Figure 1a. The conditional effect of HPWS on quality-enhancement attribution was stronger for low PDO employees (β = .69, SE = .21; 95% CI [.42, .85], p < .01) than high PDO employees (β = .31, SE = .15; 95% CI [.09, .67], p < .05).

In addition, the results showed an interaction effect of HPWS and PDO on cost-reduction attribution (β = .12, p < .05). The interaction effect is depicted in Figure 1b. The effect of HPWS on quality-enhancement attribution was stronger for low PDO employees (β = -.60, SE = .11; 95% CI [-.78, -.22], p < .01) than high PDO employees (β = -.18, SE = .12; 95% CI [-.35, .02], *ns*). These findings support H2a and H2b.

As mentioned in the Introduction we also analyzed the perceptions of HPWS (the manipulation checks) to predict the two HR attributions. The results of a linear regression analyses and the use of Hayes' (2013; see also Hayes & Rockwood, 2017) process macro for

SPSS show main effects of HPWS practices on both quality-enhancement attribution: (β =.61, $p < .01$), and cost-reduction attribution (β = -.30, $p < .01$) and show significant interactions (quality-enhancement attribution: β = -.22, $p < .01$, and cost-reduction attribution: β = .18, $p < .05$). The results did not show a significant main effect for PDO. This means that these findings support H1a, H1b, H2a and H2b.

DISCUSSION

The results of the experimental study supported our hypotheses regarding the relationships between HPWS, PDO, and HR attributions. Employee perceptions of high HPWS lead to more quality-enhancement attribution and less cost-reduction attribution. Moreover, employee PDO moderates both relationships, the relationships being stronger for low-PDO employees than for high-PDO employees. The moderating role of PDO provides a novel explanation of why individuals respond to HPWS with different HR attributions.

By using a vignette-based experimental design, we gained a better understanding of the causal nature of the relationship between HPWS and HR attributions. Participants in Study 1 were asked to respond based on the vignettes presented to them. As the background information was standardized across the experimental conditions (part one in the vignette), the only factor that was different was the high vs. low HPWS condition. Additionally, the manipulation checks showed that the participants understood the experimental conditions, so the response differences between the two groups were very likely triggered by the experimental manipulations. Despite the advantages of the experimental design, Study 1 had two shortcomings. First, the internal validity (clarifying the nature of the relationships between HPWS and HR attributions) gained via the experimental design came at the cost of external validity, so it is unclear whether the findings of Study 1 can be generalized to real

organizational contexts. Second, our respondents in Study 1 were university students (although 47% had some work experience). As such, their reactions to the vignettes may differ from actual employees' reactions to HPWS. HR scholars commonly assert that students should not be recruited to study workplace phenomena. There is, however, almost no empirical evidence to support the claim that the nature of the research sample matters much in making generalizing inferences (Highhouse & Gillespie, 2009). Nevertheless, "samples matter when there is a specific, well-defined population of interest" (Highhouse & Gillespie, 2009, p. 250). For instance, a study on the attitudes and behavior of nurses should only contain nurses. Thus, a student sample may not be the best for studying HPWS. To improve on this, we recruited an employee sample to consolidate the findings from Study 1.

Study 2

METHOD

Sample. We used an online survey and collected data from 255 Chinese employees (54% female). Respondents were recruited from a variety of industries by means of a convenience sample. Their average age was 32.32 (*SD* = 6.81). Their tenure within the organization was on average 8.62 years (*SD* = 9.62 years). Sixty percent of the employees were employed in an organization with less than 500 employees, and 82% of the respondents were employed with a full time and continuing contract. The respondents came from different types of organization, including private enterprises (28%), foreign-invested organizations (21%), state-owned enterprises (14%), joint ventures (11%), government (9%) and others (17%).

Measurement. All items were measured on a six-point scale (1 = *totally disagree* and 6 = *totally agree*). We changed the Likert-scale from a seven-point scale (in Study 1) to a six-point scale to address Chinese respondents' tendency to conceal positive emotions and hence select

midpoints of a range (Lee, Jones, Mineyama & Zhang, 2002; see also Li, Frenkel & Sanders, 2011).

Employee perception of HPWS. The respondents were asked to indicate the extent to which HPWS were perceived in their organization by using 17-items from the 27-item high-performance HR practices scale developed by Sun et al. (2007). We selected the 17 items from the different domains (selective staffing, extensive training, employment security, results-oriented appraisal, and participation) in such a way as to have a tight connection to the text in the vignettes (Study 1). Example items are "Great effort is taken to select the right person" and "The duties within the job are clearly defined." The internal reliability was good (Cronbach's α = .84).

Employee PDO. The same items were used as in Study 1, but employees were asked to indicate their agreement on a six-point Likert-scale (instead of a seven-point scale). The internal reliability was acceptable (Cronbach's α = .71).

Quality-enhancement and cost-reduction attributions. These were measured with five items each developed by Nishii et al' (2008) on a six-point Likert-scale. The respondents were asked to indicate why five HR practices (training, benefits of health care and retirement plans, hiring, pay and organization schedule such as hours, and flexibility and leave policies) were implemented in their organization in terms of quality-enhancement and cost-reduction attributions. Example items are "[HR practice] is implemented in our organization in this way in order to help employees deliver quality service to customers" and "it is in order to keep costs down". The reliability of the two HR attributions was good (Cronbach's α = .88 for quality-enhancement attribution; Cronbach's α = .85 for cost-reduction attribution).

Controls. We controlled for organization size, in addition to employee gender, age, and tenure of the employees. Organization type was not related to perception of HPWS, HR attributions, or PDO. Therefore, organization type was not accounted for in the analysis.

Analysis. We analyzed the data using regression analyses as our hypotheses focused on the individual level and employees in our sample were not clustered in organizations.

RESULTS

Measurement model. We tested the four-factor measurement model: perception of HPWS, PDO, and quality-enhancement and cost-reduction HR attributions. The model provided a good fit to the data: $\chi^2(df = 458) = 795.51$, $p = .35$, CFI = .97, RMSEA = .02, SRMR = .04. Two alternative models were also tested. In the first one, the items for attributions were combined into one factor. This model produced a poor fit: $\chi^2(df = 461) = 832.06$, $p < .01$, CFI = .82, RMSEA = .14, SRMR = .11. In the second alternative model, all of the items were loaded on a single factor. This model again produced a poor fit: $\chi^2(df = 464) = 1185.25$, $p < .01$, CFI = .58, RMSEA = .19, SRMR = .17. As a result, we opted to retain the hypothesized measurement model for further analysis.

Descriptive analysis. Table 3 shows the means, *SD,* and correlations between the variables. Employee perceptions of HPWS were positively related to quality-enhancement attribution ($r = .63$, $p < .01$) and negatively related to cost-reduction attribution ($r = -.37$, $p < .01$). Quality-enhancement and cost-reduction attributions were negatively related ($r = -.53$, $p < .01$). The table also shows a negative correlation between age and tenure ($r = -.38$, $p < .01$), meaning that the older the employee, the lower their tenure.

Hypothesis testing. The results of the hypotheses testing are reported in Table 4. Hypothesis 1 stated that employee perceptions of HPWS are positively related to quality-

enhancement attribution (H1a) and negatively related to cost-reduction attribution (H1b). The results in Table 4 show that after controlling for sex, age, tenure, and organization size, employee perceptions of HPWS were positively related to quality-enhancement attribution (b = .64, p < .01) and negatively related to cost-reduction attribution (b = -.39, p < .01). These results support H1a and H1b.

H2 stated that PDO moderates the relationships between perceptions of HPWS and the two HR attributions. Similar to Study 1, we used Hayes' (2013; see also Hayes & Rockwood, 2017) process macro for SPSS to test the moderating effect of PDO. The interaction effect of perceptions of HPWS and PDO on quality-enhancement attribution was negative (β = -.24, p < .05). The interaction effect is depicted in Figure 2a. The effect of perceptions of HPWS on quality-enhancement attribution was stronger for low PDO employees (β = .71, SE = .09; 95% CI [.37, .93], p < .01) than high PDO employees (β = .55, SE = .19; 95% CI [.35, .69], p < .05).

In addition, the results showed a significant interaction effect of perceptions of HPWS and PDO on cost-reduction attribution (β = .17, p < .05). The interaction effect is depicted in Figure 2b. The effect of perceptions of HPWS on cost-reduction attribution was again stronger for low PDO employees (β = -.48, SE = .11; 95% CI [-.57, -.22], p < .01) than high PDO employees (β = -.10, SE = .04; 95% CI [-.35, -.02], p < .05). These findings support H2a and H2b.

GENERAL DISCUSSION

In both the experimental study and the field study, we found that employee perceptions of HPWS were related to their quality-enhancement and cost-reduction attributions. Further, our findings suggest that the relationships between perceptions of HPWS and the two HR attributions are stronger for low-PDO employees than for high-PDO counterparts.

Theoretical implications and future research

Hewett et al. (2018) concluded in their review that there is a "dearth of research" on the antecedents of HR attributions. To address this research gap, we studied the influence of employee perceptions of HPWS on their quality-enhancement and cost-reduction attributions. Connecting attribution and signaling theory, our findings indicate that HPWS are influential in the formation of employees' attributions. When implementing HPWS, management sends out a strong and clear signal that employees are viewed as valuable and are expected to produce and deliver high-quality goods and service. Employees receive such strong signals easily and their perceptions of HPWS are consequently high (as evidenced by manipulation checks in Study 1), which leads them to interpret HPWS as management intended, being more likely to form quality-enhancement attributions and less likely to form cost-reduction attributions. This means that employee perceptions of HPWS can be considered an important antecedent of the formation of HR attributions. Future research should investigate and examine how other factors, such as supervisors and colleagues as potential sources, may influence the formation of HR attributions. It might also be interesting to examine the effect of individual HR practices contained within HPWS; for example, employee perceptions of participation in decision-making may encourage employees to voice their thoughts and may signal to employees that their organization values their opinions by seeking their input to enhance performance.

Furthermore, our findings suggest that the relationships between employee perceptions of HPWS and HR attributions are not straightforward, being subject to and moderated by other conditions, such as employees' PDO. The moderating effect of employees' PDO found in our study suggests that more such factors need to be considered to fully understand the relationship between HPWS and HR attributions. Further research may consider incorporating other cultural

value orientations, such as femininity and uncertainty avoidance, to investigate the HR process from a cross-cultural perspective (see also Farndale & Sanders, 2017).

Finally, we used different ways of measuring employee perceptions of HPWS in the two studies: the descriptive measure of the HPWS manipulation and the evaluative manipulation checks in Study 1, and the evaluative Sun et al. (2007) scale in Study 2. If we compare the effects of the three measures, we find that the effects of the latter two evaluative measures are closer to each other than to the first, descriptive one (Table 5). When using HPWS manipulations, the effects of HPWS on the quality-enhancement and cost-reduction attributions are opposite to each other. In addition, in terms of the evaluative measures, the positive effects of HPWS perceptions on quality-enhancement attribution are stronger and the negative effects of HPWS perceptions on cost-reduction attribution are weaker in comparison to the descriptive measure. These findings suggest that perceived HPWS is more effective at facilitating the positive attribution than inhibiting the negative attribution. These results are overall complementary and clearly indicate that HPWS perceptions are a reliable influence on employees' HR attributions.

After reviewing 28 studies with evaluative employee perception items, Beijer et al. (in press) categorize these evaluative items as either "low" evaluative (e.g., "There is an effort to locate opportunities for employees to apply their expanding knowledge and abilities," and "Our organization includes high wages") or "high" evaluative items (e.g., "Employees in my unit have many opportunities for career development," and "Feedback on performance is given in a way that helps me to 'grow' and feel inspired to give my best"). The high evaluative items essentially ask for more subjective evaluation or interpretation. In our study, we compared different ways of measuring employee perceptions of HR practices. While the manipulation

check items in Study 1 can be categorized as high evaluative, the items in Study 2 (Sun et al., 2007) are low evaluative. The results of the two studies show that the effect sizes do not systematically differ, meaning that the category of evaluative items used is relatively less important. Given the affective nature of the evaluative items, a close link between evaluative items and outcomes (in our case, attributions) can be expected. Future research should include descriptive measures for employee perceptions and examine the differences, as Beijer et al. (in press, p. 11) propose that "descriptive and evaluative items of perceived HR practices tap into and represent related, but distinct underlying descriptive and evaluative perceptions of HR practices constructs."

Research shows that employee perceptions of HR practices are not free from the influence of their social environment. For instance, drawing on social comparison theory (Henderson, Wayne, Shore, Bommer, & Tetrick, 2008), when employee perceptions of HR practices differ from those of their colleagues or supervisors, they may report injustice, which in turn may undermine the effects of employee perceptions of HR practices on employee outcomes. This means that, in addition to the influence of HPWS, other influences should be taken into account in future research.

Limitations

Although Studies 1 and 2 in combination increase the internal and external validity of the research findings, the studies individually suffer from some shortcomings. The limitations of Study 1 include the use of a student sample, using a vignette as the stimulus for responses, and the single-item measure for HR attributions (see the discussion section in Study 1). The limitations of Study 2 include the cross-sectional and single-level research design. Thus, some improvements are needed in future research, such as a field experimental study or a

longitudinal study in which the different variables of our model are assessed in two or more waves. Nevertheless, the consistency of the findings from the two studies indicate that they are not undermined by these shortcomings.

Second, as the focus of this study was on the cultural value of PDO at the individual level, we cannot generalize the results to cross-cultural HRM at the national level. In other words, we cannot make country-level inferences based on the findings from an individual-level study. Future research should examine if the same psychological mechanism as in PDO can be found at the national level. In this way, it can be determined if the associations between employee perceptions of HPWS and HR attributions are stronger in low power distance countries like the Netherlands, the United States, and the Nordic countries than in high power distance countries like China, Mexico, Panama, and Malaysia. Future research should also focus on the effect of PDO in different countries, as this may affect the relationships between perceptions of HPWS and HR attributions at the employee level, as low-PDO employees may demonstrate the strongest effect in low power distance countries (three-way interaction; see, for instance, Kirkman et al., 2009).

The PDO of the respondents was relatively low in both samples (Study 1: 2.80 on a seven-point Likert scale, which is equal to 2.50 on a six-point Likert scale; Study 2: 2.83 on a six-point Likert scale). The relatively low PDO in Study 1 can be explained by the respondents being international and domestic students from an Australian university, as Australia is relatively low on PDO (Hofstede, 1980). Although the PDO of the Chinese sample (Study 2) was higher than that in Study 1, the relatively low PDO in the latter sample may also have been caused by the relatively young average age of the respondents (32.29 years). Research shows that PDO for younger Chinese people is lower than for older people (Lin & Sun, 2018; Ralston,

Egri, Stewart, Terpstra, & Kaicheng, 1999). In line with this finding, we found a positive relationship between age and PDO (.17, $p < .05$; see Table 3).

We used different Likert scales to measure PDO, a seven-point Likert scale in Study 1 and a six-point Likert scale in Study 2, although the items were taken from the same scale developed by Yoo et al. (2011). As a result, we cannot compare the PDO means directly, but we can compare the effect of PDO on HR attributions and on the relationship between HPWS practices and HR attributions between the two studies. The results show that seven out of the eight identified effects are similar, and only the negative effect of PDO on the quality-enhancement attribution in Study 1 is significant and different from the one in Study 2. This means that we can conclude that the different Likert scales did not influence our results.

Third, we lack information on the response rates and profiles of the respondents compared to the non-respondents in the two studies. For Study 1, we used the student subject pool of an Australian university. Every semester, all students of a large undergraduate management course have to attend two experimental studies in order to receive credit for this course (or complete another assignment). However, the age and percentage of the female respondents are comparable with the mean age and percentage of females in the whole course. In Study 2, we used a convenience sample, meaning that we do not have information about the response rates and differences between the profiles of our respondents compared to the non-respondents

Finally, we would like to draw attention to the one-item measure used for HR attributions in Study 1. In Study 2, we instead used a five-item scale for the two HR attributions as formulated by Nishii et al. (2008). The difference between these two measures is that, instead of presenting the overall HR practices, five individual HR practices are mentioned in the

different items: "1. Training / 2. Benefits (e.g., health care, retirement plans) / 3. Hiring / 4. Pay / 5. Schedule (e.g., hours, flexibility, leave policies) are implemented in your organization in this way because…." Study 2 had a high reliability for both the five items of the quality-enhancement attribution (Cronbach's α = .88) and the cost-reduction attribution (Cronbach's α = .85). Further inspection revealed that the five items are highly intercorrelated ($r_s > .56$, $p < .01$). Moreover, the correlations between the two attributions across the two studies showed a similar pattern (Study 1: r = -.38, $p < .01$; Study 2: r = -.53, $p < .01$). The correlations between HPWS and the two attributions showed a similar pattern as well (Study 1: r = .51, $p < .01$ for the quality-enhancement attribution, and r = -.45, $p < .01$ for the cost-reduction attribution; Study 2: r = .63, $p < .01$ for the quality-enhancement attribution, and r = -.37, $p < .01$ for the cost-reduction attribution). Despite the limitation of the one-item measure used in Study 1, we are confident that it is valid given the high intercorrelations among the five items in Study 2 and the similar pattern of correlations between Studies 1 and 2. However, future research in which the two measures used in Studies 1 and 2 are combined is needed to confirm this validity.

Practical implications

Our findings have two practical implications. HR professionals and managers need to be more aware of the fact that how employees perceive HR practices influences how they characterize these HR practices within the organization. Employees perceive HR differently than HR professionals and managers do (Liao, Toya, Lepak, & Hong, 2009). As HR attributions play an important role in helping employees make sense of HR arrangements, organizations need to communicate their policies to employees directly and clearly. In other words, HR departments should be responsible not only for making HR strategies but also for communicating them.

The moderating effect of employee PDO shows that it is important in the relationship between their perceptions of HPWS and their HR attributions, which managers should be aware of in the sense that the relationship is more direct and straightforward for low-PDO employees than for high-PDO employees. Therefore, managers can communicate HPWS practices directly to low-PDO employees to influence their HR attributions. Our results do not directly elucidate how high-PDO employees react to the relationship between perceived HPWS and their HR attribution, so managers should be cautious with regard to this. At the same time, employees can become (more) aware of their own PDO and the influence of this orientation in terms of communication style, participation in decision-making, and their resistance. In other words, by making employees more aware of their own PDO, they may change their orientation.

To put a finer point on it, HR professionals should be careful in how they communicate to high-PDO employees as well as who is involved in the process of communication in order to encourage employee participation and responses. For instance, HR professionals can explain in both formal and informal communication the implementation of new HR practices in more detail and explain the intentions behind them (see also Zagenczyk et al, 2015). Helpap (2016) found in an experimental study that low-PDO employees respond better to participatory communication. In addition, as high-PDO employees value horizontal communication over vertical communication (Khatri, 2009), managers can ask the colleagues of high-PDO employees to discuss and explain the intentions of the organization to them.

Conclusion

The findings of the experimental and field studies highlight the importance of HPWS to employee quality-enhancement and cost-reduction HR attributions. Furthermore, the findings suggest that employees' PDO matters in adjusting the relationships between HPWS and HR

attributions. While low-PDO employees make a straightforward and direct connection between HPWS and their HR attributions, the connection is less pronounced among high-PDO employees. Our paper makes two significant contributions to the HR process literature. First, it addresses the under-studied question of what shapes employees' HR attributions. Second, it points out that cultural values play an important role in HR process research.

Acknowledgement

We would like to thank Dr. Sandra Fisher, associate editor of the *International Journal of Human Resource Management,* and two anonymous reviewers for their valuable feedback on previous versions of this article. Karin Sanders was working on a revision of this article during an appointment as a Visiting Professor at the Aston Business School (Work & Organisational Psychology), Aston University, Birmingham, UK.

Notes

[1] We checked the differences between the students with and without work experience on the relevant variables and did not find any significant differences in the relationships between the relevant variables (HPWS, PDO, and HR attributions).

[2] Aon Hewitt, the global talent, retirement, and health solutions business of AON, reported an average turnover rate in China of 20.8%, with a voluntary turnover rate of 14.9% and an involuntary turnover rate of 5.9%. AON showed in 2012 that the employee turnover rate in China was 18.9%. In some industries, the turnover rate went up to 40%. The correlation suggests that the increasing turnover rate is higher for older employees.

REFERENCES

Alexander, C., & Becker, M. (1978). The use of vignettes in survey research. *Public Opinion Quarterly, 42,* 93–104.

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A.L. (2000). *Manufacturing advantage: Why High-Performance work systems pay off*. Ithaca: Cornell University Press.

Arthur, J.B. (1992). The link between business strategy and industrial relations systems in American steel mini-mills. *Industrial and Labor Relations Review, 45 (3),* 488-506.

Arthur, J.B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal, 37 (3),* 670-687.

Beijer, S., Peccie, R., Van Veldhoven, M., Paauwe, J. in press. The turn to employees in the measurement of human resource practices: A critical review and proposed way forward. *Human Resource Management Journal.*

Berkowitz, L. & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American Psychologist, 35*, 463-464.

Bowen, D.E. & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of "Strength" of the HRM system. *Academy of Management Review, 29,* 203-221.

Brockner, J. Ackerman, G., Greenberg, J., Gelfand, M.J., Francesco, A.M., Chen, Z.X., Leung, K., Bierbrauer, G. Gomez, G., Kirkman, B.L., & Shapiro, D. (2001). Culture and procedural justice: The influence of power distance on reactions to vote. *Journal of Experimental Social Psychology, 37,* 300-315.

Chen, D., & Wang, Z. (2014). The effects of human resource attributions on employee outcomes during organizational change. *Social Behaviour and Personality: An International Journal, 42(9),* 1431-1443

Chen, Z.X., & Aryee, S. (2007). Delegation and employee work outcomes: An examination of the cultural context of mediating processes in China. *Academy of Management Journal, 50,* 226-238

Clughston, M., Howell, J.P., & Dorpman, P.W. (2000). Does cultural socialization predict multiple bases and foci of commitment? *Journal of Management, 26,* 5-30.

Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal, 49,* 544–560.

Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do High-Performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology, 59*, 501-528.

Connelly, B.L., Certo, S.T., Ireland, R.D., Reutzel, C.R. (2000). Signalling Theory: A Review and Assessment. *Journal of Management, 37(1),* 39-67

Cook, T.D., & Campbell, D.T. (1967). The design and conduct of quasi-experiments and true experiments in field settings. In: M. Dunette (Ed.). *Handbook of industrial and organizational psychology*, (pp. 223-326). Skokie, IL: Rand McNally.

Den Hartog, D.N. Boon, C., Verburg, R.M., Croon, M.A. (2013). HRM, Communication, Satisfaction, and Perceived Performance: A Cross-Level Test. *Journal of Management, 39 (6),* 1637-1665

Cook, T.D. & Campbell, D.T. (1979). *Quasi-experimentation*. New York: Rinehart

Ehrnroorth, M. & Bjorkman, I. (2012). An integrative HRM process theorization: Beyond signalling effects and mutual Gains. *Journal of Management Studies, 49 (6),* 1109-1135

Farh, J.L., Hackett, R.D., & Liang, J. (2007). Individual-level cultural value as moderators of perceived organizational support – employee outcome relationships in China: Comparing the effects of power distance and traditionality. *Academy of Management Journal, 50*, 715-729

Farndale E. & Sanders K. (2017). Conceptualizing HRM system strength through a cross-cultural lens, *International Journal of Human Resource Management*, 28 (1), 132-148.

Fiske, S.T., & Taylor, S.E. (1991). Social cognition. From brains to culture (2nd ed.). London: Sage.

Fontinha, R., Jose Chambel, M., & De Cuyper, N. (2012). HR attributions and the dual commitment of outsourced IT workers. *Personnel Review, 41(6),* 832-848

Gomez, C.B., Kirkman, B.L., & Shapiro, D.A. (1999). The impact of power distance on the relationships between participation and organisational commitment in Argentina, Mexico and the United States. Paper presented at the Annual Meeting of the Academy of Management. Chicago.

Helpap, S. (2016) The Impact of Power Distance Orientation on Recipients' Reactions to Participatory Versus Programmatic Change Communication. *Journal of Behavioral Science, 52(1),* 5-34.

Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford.

Hayes, A.F. & Rockwood, N.J. (2017). Regression-based statistical mediation and moderation analysis in clinic research: Observations, recommendations and implementation. *Behaviour Research and Therapy, 98*, 39-57

Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley.

Henderson, D. J., Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. 2008. Leader--member exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology, 93(6),* 1208.

Hewett, R., Shantz, A., Mundy, J., & Alfes, K. (2018). Attribution theories in Human Management Research: A review and research agenda. *International Journal of Human Resource Management.*

Highhouse, S., & Gillespie, J.Z. (2009). Do samples really matter that much? In: C.E. Lance & R.J. Vandenberg (Eds). *Statistical and Methodological Myths and Urban Legends. Doctrine, Verity and Fable in the Organizational and Social Sciences*. Taylor & Francis Group. Chapter 10, pp. 247-265.

Hofstede, G. (1980). *Culture's consequences: international differences in work-related values.* Beverly Hills CA: Sage Publications.

Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6,* 1-55.

Huselid, M.A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal, 38,* 635–672.

Jiang, K., Hu, J., Liu, S., & Lepak, D. P. 2017. Understanding employees' perceptions of human resource practices: Effects of demographic dissimilarity to managers and coworkers. *Human Resource Management, 56(1),* 69-91.

Jones, E.E. & Davis, K.E. (1965). From acts to dispositions: The attribution process in person perception. In: L. Berkowitz (Ed.) *Advances in experimental social psychology*, Vol. 2 (pp 219-266). New York: Academic Press.

Jiang, K., Lepak, D., Hu, J., & Baer J. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal, 55*, 1264–1294.

Khatri, N. (2009). Consequences of power distance orientations in organisations. *Vision, 13(1),* 1-9.

Kelley, H.H. (1967). Attribution theory in social psychology. In: D. Levine (Ed.), Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press.

Kelley, H.H. & Michela, J.L. (1980). Attribution theory and research. *Annual Review of Psychology, 31*, 457-501

Kirkman, B.L., Lowe, K.B., & Gibson, C.B. (2006). A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural value framework. *Journal of International Business Studies, 37*, 285-320.

Kirkman, B.L. Chen, G., Farh, J-L, Chen, Z.X. & Lowe, K.B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal, 52 (4),* 744-764.

Lam, S.S.K., Schaubroeck, J., & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: A cross-national study. *Journal of Organizational Behavior, 23,* 1-18.

Lee, C., Pillutla, M., Law, K.S. (2000). Power distance, gender and organizational justice. *Journal of Management, 26*, 685-704.

Lee, J.W., Jones, P.S., Mineyama, Y, & Zhang, X.E. (2002). Cultural differences in Responses to a Likert Scale. Research in Nursing & Health, 25, 295-306

Li, X., Frenkel, S.J., & Sanders, K. (2011). Strategic HRM as process: how HR system and organizational climate strength influence Chinese employee attitudes. The International Journal of Human Resource Management, 22 (9), 1825-1842.

Lin, CH.V. & Sun, JM. (2018). Chinese employees' leadership preferences and the relationship with power distance orientation and core self-evaluation. *Frontiers of Business Research in China*, 12. https://doi.org/10.1186/s11782-018-0027-9

Muthén, L., & Muthén, B. (2012). *Mplus User's Guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.

Newman, K.L., & Nollen, S.D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of International Business Studies, 27,* 753-779

Nishii, L.H., Lepak D.P. & Schneider, B. (2008). Employee attributions of the "why" of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction, *Personnel Psychology, 61,* 503–545.

Ostroff, C., & Bowen, D.E. (2016.) Reflections on the 2014 Decade Award: Is there strength in the construct of HR system strength? *Academy of Management Review, 41(2),* 196-214.

Pfeffer, J. 1998. *The human equation: Building profits by putting people first*. Boston, MA: Harvard Business School Press.

Ralston, D.A., Egri, C.P., Stewart, S., Terpstra, R.H. and Kaicheng, Y. (1999). Doing business in the 21st century with the new generation of Chinese managers: A study of generational shifts in work values in China. *Journal of International Business Studies*, 30, 415–428.

Sanders, K., Shipton, H., & Gomes, J. (2014). Is HRM process important? Past, current, and future Challenges. *Human Resource Management, 53*, 489-503.

Sanders, K. & Yang, H. (2016). How to make sense of Human Resource Management; employees' attribution to explain the HRM – Performance relationship. *Human Resource Management, 55*, 201-217.

Shantz, A., Arevshatian, L., Alfes, K., & Bailey, C. (2016). The Effect of HRM Attributions on emotional exhaustion and mediating roles of job involvement and work overload. *Human Resource Management Journal, 26,* 172-191.

Snell, S., & Dean, J. (1992). Integrated manufacturing and human resource management: A human capital perspective. *Academy of Management Journal, 35,* 467–504.

Stiglitz, J.E. (2000). The contributions of the economics of information to twentieth century economics. *Quaterley Journal of Economics, 115,* 1441-1478.

Sun, L.-Y., Aryee, S., & Law, K.S. (2007). High-Performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal, 50*, 558-577.

Tandung, J.C. 2016. The link between HR attributions and employees' turnover intentions. *Gadjah Mada International Journal of Business, 18 (1),* 55.

Van de Voorde, F.C. & Beijer, S. (2015). The role of employee HR attributions in the relationship between High-Performance work systems and employee outcomes. *Human Resource Management Journal, 25,* 62-78

Walton, R. (1985). From control to commitment in the workplace. *Harvard Business Review, 63,* 76-84.

Weiner, B. (1985). Spontaneous causal thinking. *Psychological Bulleting, 97,* 74-84.

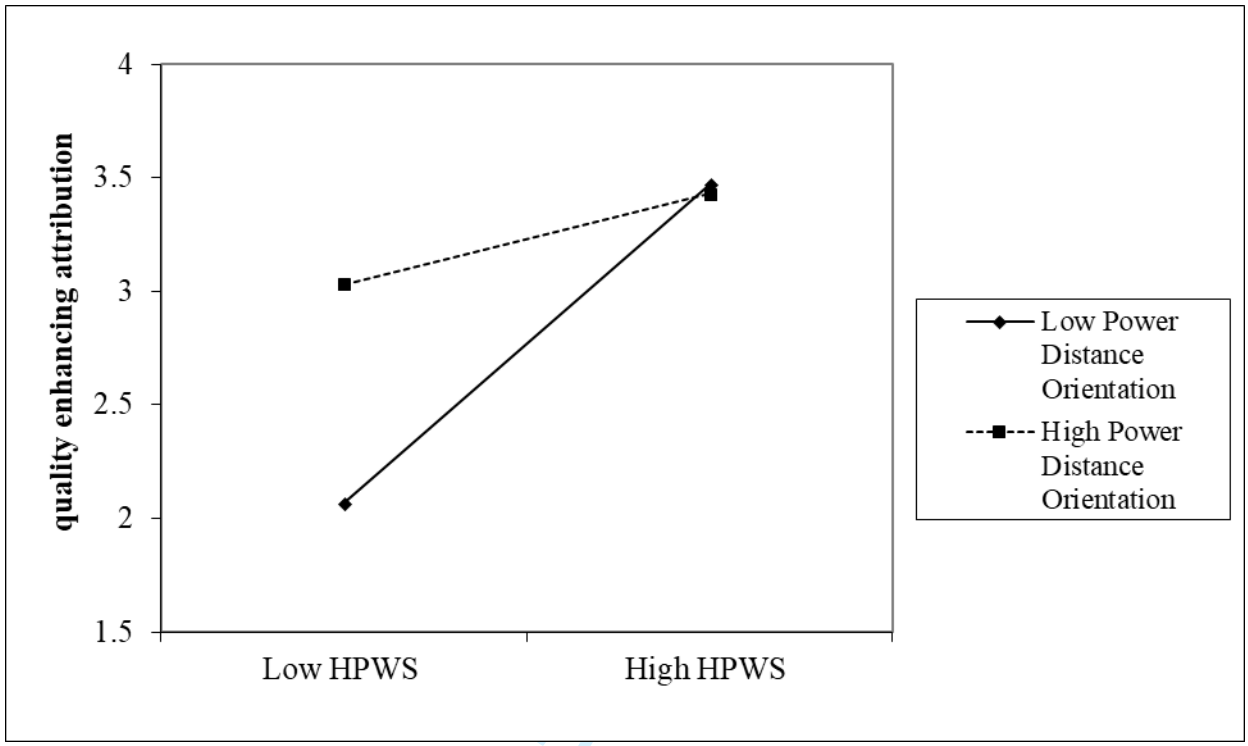
Yang, H., & Dickinson, J. (2014). Experimental method in HRM research. In: Sanders, K. Bainbridge, H., & Cogin, J. *Research Methods for Human Resource Management.* Routledge.

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CSSCALE. *Journal of International Consumer Marketing, 23,* 1528-7068.

Zagenczyk, T.J., Cruz, K.S., Cheung, J.H., Scott, K.L., Kiewitz, C. & Galloway, B. (2015) The moderating effect of power distance on employee responses to psychological contract breach, *European Journal of Work and Organizational Psychology, 24 (6),* 853-865.

Zhong, L., Wayne, S.J., & Liden, R.C. (2016). Job engagement, perceived organizational support, High-Performance human resource practices, and cultural value orientations: A cross-level investigation. *Journal of Organizational Behavior, 37,* 823-844.

Figure 1. Interaction between HPWS and power distance orientation on quality-enhancement attribution (Figure 1a) and cost-reduction attribution (Figure 1b); (Study 1).



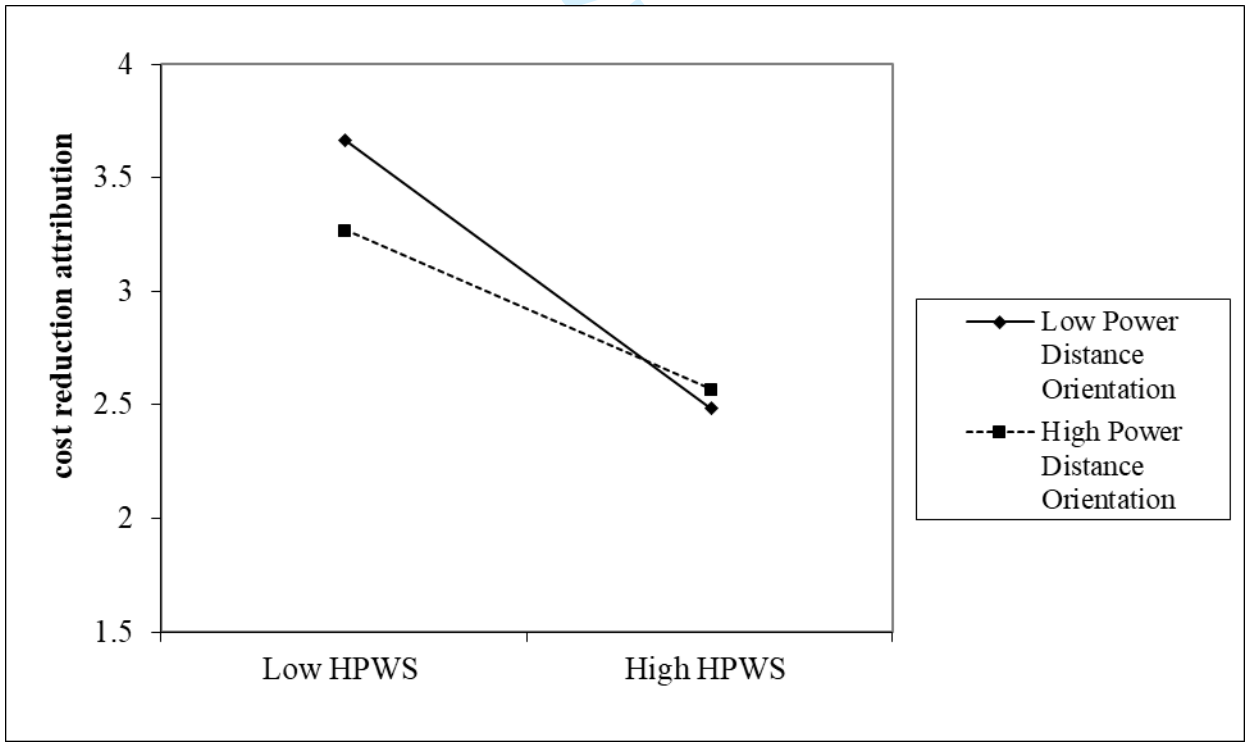
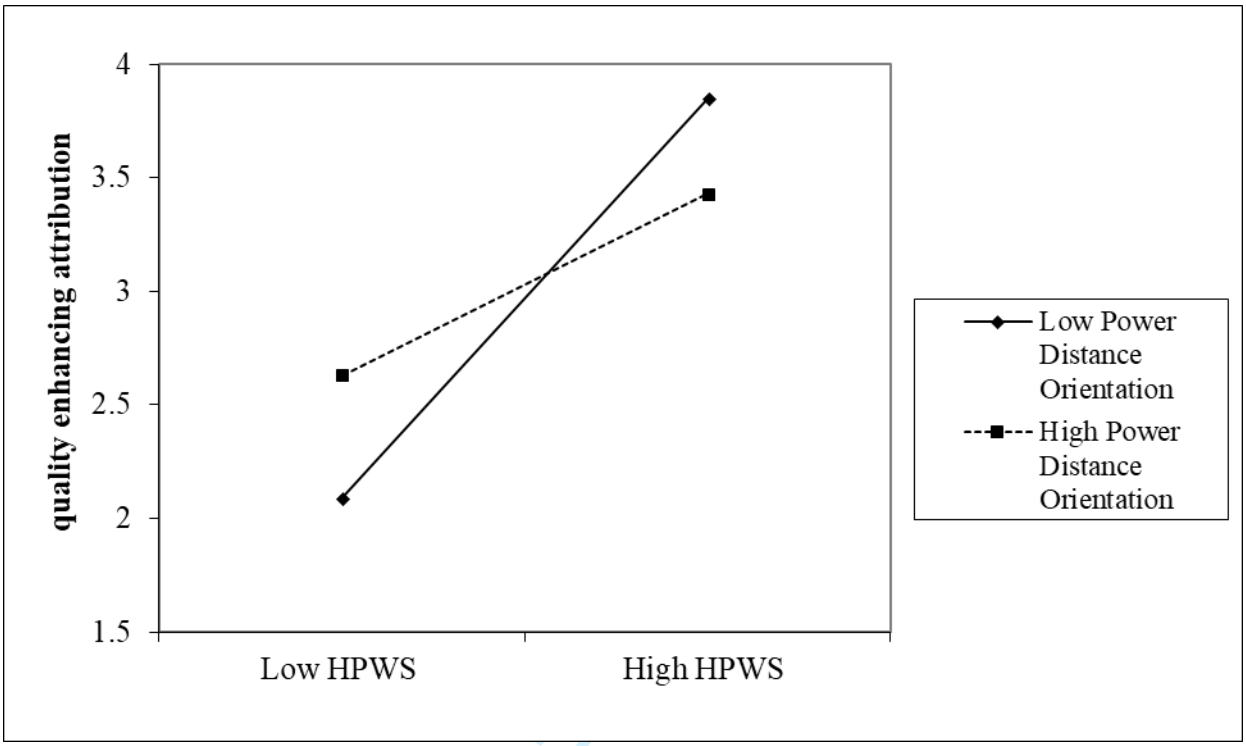


Figure 2. Interaction between HPWS and power distance orientation on quality-enhancement attribution (Figure 2a) and cost-reduction attribution (Figure 2b) (Study 2).



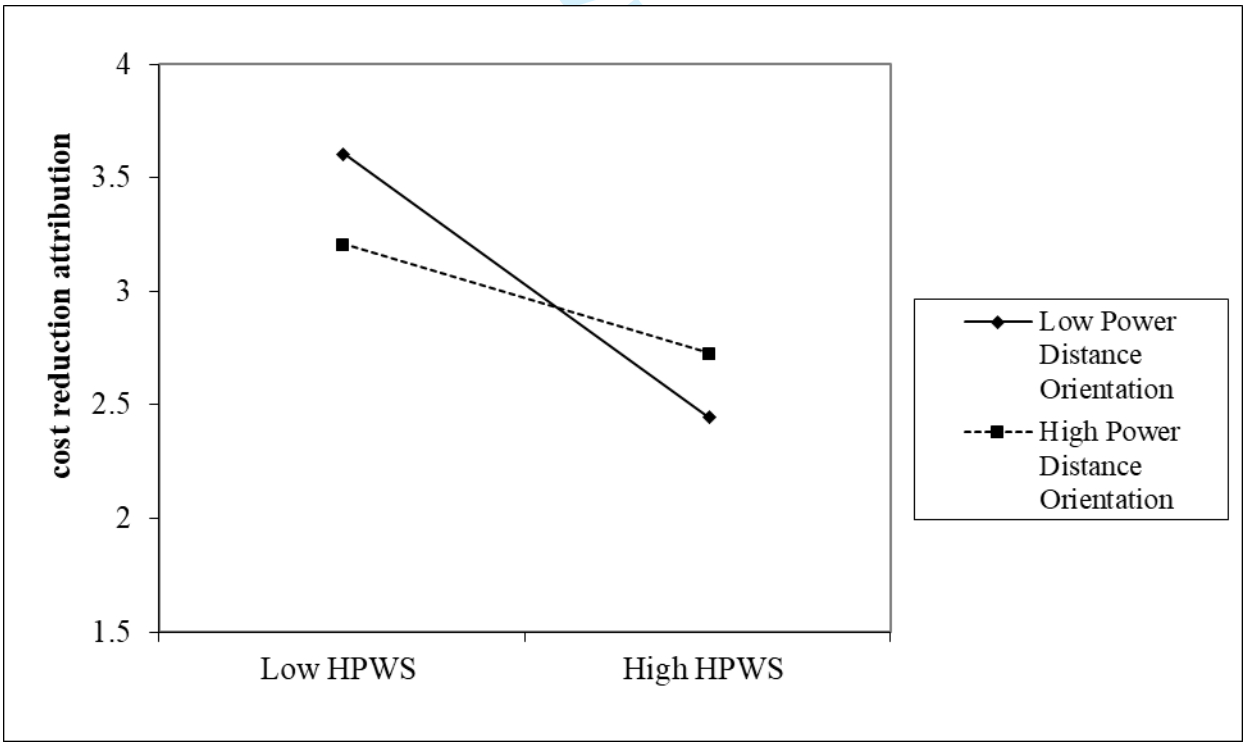


Table 1. Means, standard deviations and correlations between the variables (Study 1, $N = 145$).

Variables	*M*	*SD*	1.	2.	3.
1. HPWS (low vs high)	*n.a*	*n.a*			
2. Quality-enhancement attribution	4.83	1.67	.51**		
3. Cost-reduction attribution	4.82	1.58	-.45**	-.38**	
4. Power Distance Orientation	2.80	1.02	.05	.21**	-.08

*$p < .05$. **$p < .01$. All items were measured on a seven-point Likert Scale in Study 1.

Table 2. Results of the regression analyses with quality-enhancement and cost-reduction attributions as the dependent variable (Study 1, $N = 145$).

	Quality-enhancement Attribution		Cost-reduction Attribution	
Predictors	Model 1	Model 2	Model 1	Model 2
Hypotheses				
HPWS (low vs high; H1)[1]	.51**	.45**	-.48**	-.47**
Power Distance Orientation (PDO)		.23**		-.08**
HPWS * PDO (H2)		-.25**		.12**
Explained variance	.25**	.34**	.20**	.25**

*p <.05. **p < .01. [1] In this study HPWS was manipulated in low and high HPWS conditions.

Table 3. Means, standard deviations and correlations between the variables (Study 2, $N = 255$)

Variables	*M*	*SD*	1.	2.	3.	4.	5.	6.	7.
1. HPWS	3.90	.64							
2. Quality-enhancement attribution	4.25	.86	.63**						
3. Cost-reduction attribution	3.94	.95	-.37**	-.53**					
4. Power Distance Orientation	2.83	.70	-.01	-.02	-.03				
5. Gender	1.55	.50	.02	.08	.05	-.11			
6. Age	32.29	6.81	-.06	-.03	-.13	.17*	-.15*		
7. Tenure	3.72	.81	-.01	-.14*	-.01	-.11	.04	-.38**	
8. Organizational size	3.28	1.25	.12	-.01	.03	-.04	-.09	-.12	-.05

*p <.05. **p < .01. All items were measured on a six-point Likert Scale in Study 2.

Table 4. Results of the regression analyses with quality-enhancement and cost-reduction attributions as the dependent variables (Study 2, $N = 255$).

	Quality-enhancement Attribution			Cost-reduction Attribution		
Predictors	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Controls						
Sex	.10**	.41**	.01**	.03**	.03**	.03**
Age	-.04**	-.04**	-.03**	-.05**	-.05**	-.05**
Tenure	-.07	-.04	-.08	-.14**	-.08**	-.07**
Organization size	-.01	-.06	-.06	-.01**	-.05*	-.04**
Hypotheses						
HPWS (H1)		.64**	.64**		-.39**	-.41**
Power Distance Orientation (PDO)			.03*			-.03**
HPWS * PDO (H2)			-.24**			.17**
Explained variance	.01**	.40*	.48**	.03**	.15**	.19**

*p <.05; **p < .01; ***p < .001

Table 5. The effects of the different measures of employee perceptions of HPWS

Effect of HPWS on	**Study 1 (manipulation)**	**Study 1 (manipulation checks)**	**Study 2 (Sun et al, 2007)**
Quality-enhancement	.51**	.61**	.64**
Cost-reduction	-.49**	-.30**	-.39**